

## PATENT COOPERATION TREATY

PCT

## NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Commissioner  
 US Department of Commerce  
 United States Patent and Trademark  
 Office, PCT  
 2011 South Clark Place Room  
 CP2/5C24  
 Arlington, VA 22202  
 ETATS-UNIS D'AMERIQUE  
 in its capacity as elected Office

<b>Date of mailing</b> (day/month/year) 12 December 2000 (12.12.00)	
<b>International application No.</b> PCT/FI00/00186	<b>Applicant's or agent's file reference</b> 49490
<b>International filing date</b> (day/month/year) 10 March 2000 (10.03.00)	<b>Priority date</b> (day/month/year) 10 March 1999 (10.03.99)
<b>Applicant</b> VIALEN, Jukka et al	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:  
 04 October 2000 (04.10.00)

☐ in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was  
☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No.: (41-22) 740.14.35	Authorized officer F. Baechler Telephone No.: (41-22) 338.83.38
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## PCT REQUEST

Original (for SUBMISSION) - printed on 28.03.2000 12:18:12 PM

49490

<b>0</b>	<b>For receiving Office use only</b>	
<b>0-1</b>	International Application No.	
<b>0-2</b>	International Filing Date	
<b>0-3</b>	Name of receiving Office and "PCT International Application"	
<b>0-4</b> <b>0-4-1</b>	Form - PCT/RO/101 PCT Request Prepared using	<b>PCT-EASY Version 2.90</b> <b>(updated 08.03.2000)</b>
<b>0-5</b>	<b>Petition</b> The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty	
<b>0-6</b>	Receiving Office (specified by the applicant)	<b>National Board of Patents and Registration (Finland) (RO/FI)</b>
<b>0-7</b>	Applicant's or agent's file reference	<b>49490</b>
<b>I</b>	Title of invention	<b>IDENTIFIER ALLOCATION METHOD</b>
<b>II</b>	<b>Applicant</b>	
<b>II-1</b>	This person is:	<b>applicant only</b>
<b>II-2</b>	Applicant for	<b>all designated States except US</b>
<b>II-4</b>	Name	<b>NOKIA NETWORKS OY</b>
<b>II-5</b>	Address:	<b>P.O. Box 300</b> <b>FIN-00045 Nokia Group</b> <b>Finland</b>
<b>II-6</b>	State of nationality	<b>FI</b>
<b>II-7</b>	State of residence	<b>FI</b>
<b>II-8</b>	Telephone No.	<b>+358-9-51121</b>
<b>II-9</b>	Facsimile No.	<b>+358-9-51168080</b>
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<b>III-1-1</b>	This person is:	<b>applicant and inventor</b>
<b>III-1-2</b>	Applicant for	<b>US only</b>
<b>III-1-4</b>	Name (LAST, First)	<b>VIALEN, Jukka</b>
<b>III-1-5</b>	Address:	<b>Tyrskykuja 3 b 13</b> <b>FIN-02130 Espoo</b> <b>Finland</b>
<b>III-1-6</b>	State of nationality	<b>FI</b>
<b>III-1-7</b>	State of residence	<b>FI</b>

## PCT REQUEST

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49490

III-2	<b>Applicant and/or inventor</b>	
III-2-1	This person is:	applicant and inventor
III-2-2	Applicant for	US only
III-2-4	Name (LAST, First)	LONGONI, Fabio
III-2-5	Address:	Visamäki 5 E 38 FIN-02130 Espoo Finland
III-2-6	State of nationality	IT
III-2-7	State of residence	FI
IV-1	<b>Agent or common representative; or address for correspondence</b> The person identified below is hereby/has been appointed to act on behalf of the applicant(s) before the competent International Authorities as:	agent
IV-1-1	Name	BERGGREN OY AB
IV-1-2	Address:	P.O. Box 16 FIN-00101 Helsinki Finland
IV-1-3	Telephone No.	+358-9-693701
IV-1-4	Facsimile No.	+358-9-6933944
IV-1-5	e-mail	email.box@berggren.fi
V	<b>Designation of States</b>	
V-1	Regional Patent (other kinds of protection or treatment, if any, are specified between parentheses after the designation(s) concerned)	AP: GH GM KE LS MW SD SL SZ TZ UG ZW and any other State which is a Contracting State of the Harare Protocol and of the PCT EA: AM AZ BY KG KZ MD RU TJ TM and any other State which is a Contracting State of the Eurasian Patent Convention and of the PCT EP: AT BE CH&LI CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE and any other State which is a Contracting State of the European Patent Convention and of the PCT OA: BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG and any other State which is a member State of OAPI and a Contracting State of the PCT
V-2	National Patent (other kinds of protection or treatment, if any, are specified between parentheses after the designation(s) concerned)	AE AL AM AT AU AZ BA BB BG BR BY CA CH&LI CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

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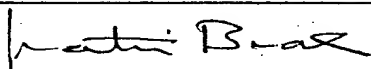
Original (for SUBMISSION) - printed on 10.03.2000 12:57:47 PM

<b>V-5</b>	<b>Precautionary Designation Statement</b> In addition to the designations made under items V-1, V-2 and V-3, the applicant also makes under Rule 4.9(b) all designations which would be permitted under the PCT except any designation(s) of the State(s) indicated under item V-6 below. The applicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time limit.		
<b>V-6</b>	<b>Exclusion(s) from precautionary designations</b>	<b>NONE</b>	
<b>VI-1</b>	<b>Priority claim of earlier national application</b>		
VI-1-1	Filing date	<b>10 March 1999 (10.03.1999)</b>	
VI-1-2	Number	<b>990527</b>	
VI-1-3	Country	<b>FI</b>	
<b>VI-2</b>	<b>Priority document request</b> The receiving Office is requested to prepare and transmit to the International Bureau a certified copy of the earlier application(s) identified above as item(s):	<b>VI-1</b>	
<b>VII-1</b>	<b>International Searching Authority Chosen</b>	<b>European Patent Office (EPO) (ISA/EP)</b>	
<b>VIII</b>	<b>Check list</b>	<b>number of sheets</b>	<b>electronic file(s) attached</b>
VIII-1	Request	<b>4</b>	-
VIII-2	Description	<b>13</b>	-
VIII-3	Claims	<b>2</b>	-
VIII-4	Abstract	<b>1</b>	<b>49490.txt</b>
VIII-5	Drawings	<b>3</b>	-
VIII-7	<b>TOTAL</b>	<b>23</b>	
	<b>Accompanying items</b>	<b>paper document(s) attached</b>	<b>electronic file(s) attached</b>
VIII-8	Fee calculation sheet	✓	-
VIII-9	Separate signed power of attorney	✓	-
VIII-10	Copy of general power of attorney	✓	-
VIII-16	PCT-EASY diskette	-	<b>diskette</b>
VIII-17	Other (specified):	<b>Copy of Official Action in FI 990527</b>	-
VIII-18	Figure of the drawings which should accompany the abstract	<b>2</b>	
VIII-19	Language of filing of the international application	<b>English</b>	

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IX-1	Signature of applicant or agent	
IX-1-1	Name	BERGGREN OY AB
IX-1-2	Name of signatory	Matti Brax
IX-1-3	Capacity	Patent Agent

## FOR RECEIVING OFFICE USE ONLY

10-1	Date of actual receipt of the purported international application	
10-2	Drawings:	
10-2-1	Received	
10-2-2	Not received	
10-3	Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application	
10-4	Date of timely receipt of the required corrections under PCT Article 11(2)	
10-5	International Searching Authority	ISA/EP
10-6	Transmittal of search copy delayed until search fee is paid	

## FOR INTERNATIONAL BUREAU USE ONLY

11-1	Date of receipt of the record copy by the International Bureau	
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**PCT (ANNEX - FEE CALCULATION SHEET)**

49490

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(This sheet is not part of and does not count as a sheet of the international application)

<b>0</b>	<b>For receiving Office use only</b>	
0-1	International Application No.	
0-2	Date stamp of the receiving Office	
0-4	<b>Form - PCT/RO/101 (Annex)</b>	
0-4-1	PCT Fee Calculation Sheet Prepared using	<b>PCT-EASY Version 2.90 (updated 08.03.2000)</b>
0-9	Applicant's or agent's file reference	<b>49490</b>
2	Applicant	<b>NOKIA NETWORKS OY, et al.</b>
12	<b>Calculation of prescribed fees</b>	<b>fee amount/multiplier      total amounts (FIM)</b>
12-1	Transmittal fee T	⇒ 800
12-2	Search fee S	⇒ 5 618.71
12-3	International fee Basic fee (first 30 sheets) b1	2 431.8
12-4	Remaining sheets	0
12-5	Additional amount (X)	53.51
12-6	Total additional amount b2	0
12-7	b1 + b2 = B	2 431.8
12-8	Designation fees Number of designations contained in international application	84
12-9	Number of designation fees payable (maximum 8)	8
12-10	Amount of designation fee (X)	523.22
12-11	Total designation fees D	4 185.76
12-12	PCT-EASY fee reduction R	-749.16
12-13	Total International fee (B+D-R) I	⇒ 5 868.4
12-14	Fee for priority document Number of priority documents requested	1
12-15	Fee per document (X)	422
12-16	Total priority document fee P	⇒ 422
12-17	<b>TOTAL FEES PAYABLE (T+S+I+P)</b>	⇒ <b>12 709.11</b>
12-19	Mode of payment	<b>cheque</b>

**VALIDATION LOG AND REMARKS**

13-2-6	Validation messages Contents	<b>Green?</b> <b>Reference number for attached copy of general power of attorney not indicated.</b>
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Original (for **SUBMISSION**) - printed on 10.03.2000 12:57:47 PM**PCT-EASY INFORMATION SHEET**

(For applicant use only, DO NOT submit this sheet with the international application)

**VALIDATION LOG**

	Contents
Green?	Reference number for attached copy of general power of attorney not indicated.

**Before submitting the International Application, please carefully verify that:**

- the information contained on printed Request form is correct;
- Box IX of the Request form has been signed;
- all elements of the International application as indicated in Box VIII of the Request form have been attached; and,
- the diskette containing the PCT-EASY zip file of the International Application has been enclosed and has been clearly labeled "PCT-EASY", with the applicant's or agent's file reference, and the first applicant's name.

**ATTENTION**

DO NOT modify any indications on the Request form printout. The attached PCT-EASY application has been locked. If an error or an omission is discovered at this time, you must copy the submitted application as a template and make the change or correction in a new application (using the submitted application as a template). You may create such a template by copying the submitted application from the "Stored Forms" folder to the "New PCT Forms" folder. Open the new (.OWO) file created in the "New PCT Forms" folder, correct the errors and proceed with the submission process again.

PCT

From the INTERNATIONAL BUREAU

NOTICE INFORMING THE APPLICANT OF THE  
COMMUNICATION OF THE INTERNATIONAL  
APPLICATION TO THE DESIGNATED OFFICES

(PCT Rule 47.1(c), first sentence)

To:

BERGGREN OY AB  
P.O. Box 16  
FIN-00101 Helsinki  
FINLANDE*Berggren Oy Ab*

22-09-2000

*pkk/sku*

Date of mailing (day/month/year) 14 September 2000 (14.09.00)		
Applicant's or agent's file reference 49490		IMPORTANT NOTICE
International application No. PCT/FI00/00186	International filing date (day/month/year) 10 March 2000 (10.03.00)	
Applicant NOKIA NETWORKS OY et al		Priority date (day/month/year) 10 March 1999 (10.03.99)

1. Notice is hereby given that the International Bureau has communicated, as provided in Article 20, the international application to the following designated Offices on the date indicated above as the date of mailing of this Notice:  
AU,DZ,KP,KR,US

In accordance with Rule 47.1(c), third sentence, those Offices will accept the present Notice as conclusive evidence that the communication of the international application has duly taken place on the date of mailing indicated above and no copy of the international application is required to be furnished by the applicant to the designated Office(s).

2. The following designated Offices have waived the requirement for such a communication at this time:

AE,AL,AM,AP,AT,AZ,BA,BB,BG,BR,BY,CA,CH,CN,CR,CU,CZ,DE,DK,DM,EA,EE,EP,ES,FI,GB,GD,  
GE,GH,GM,HR,HU,ID,IL,IN,IS,JP,KE,KG,KZ,LC,LK,LR,LS,LT,LU,LV,MA,MD,MG,MK,MN,MW,MX,  
NO,NZ,OA,PL,PT,RO,RU,SD,SE,SG,SI,SK,SL,TJ,TM,TR,TT,TZ,UA,UG,UZ,VN,YU,ZA,ZW

The communication will be made to those Offices only upon their request. Furthermore, those Offices do not require the applicant to furnish a copy of the international application (Rule 49.1(a-bis)).

3. Enclosed with this Notice is a copy of the international application as published by the International Bureau on  
14 September 2000 (14.09.00) under No. WO 00/54521

## REMINDER REGARDING CHAPTER II (Article 31(2)(a) and Rule 54.2)

If the applicant wishes to postpone entry into the national phase until 30 months (or later in some Offices) from the priority date, a demand for international preliminary examination must be filed with the competent International Preliminary Examining Authority before the expiration of 19 months from the priority date.

It is the applicant's sole responsibility to monitor the 19-month time limit.

Note that only an applicant who is a national or resident of a PCT Contracting State which is bound by Chapter II has the right to file a demand for international preliminary examination.

## REMINDER REGARDING ENTRY INTO THE NATIONAL PHASE (Article 22 or 39(1))

If the applicant wishes to proceed with the international application in the national phase, he must, within 20 months or 30 months, or later in some Offices, perform the acts referred to therein before each designated or elected Office.

For further important information on the time limits and acts to be performed for entering the national phase, see the Annex to Form PCT/IB/301 (Notification of Receipt of Record Copy) and Volume II of the PCT Applicant's Guide.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer  J. Zahra
Facsimile No. (41-22) 740.14.35	Telephone No. (41-22) 338.83.38



9 April 2001

European Patent Office  
D-80298 Munich  
Germany

FAX: 999-49-89 2399 4465

Authorized Officer: Schweitzer, J-C  
Our ref: 49490/SKU/PKK

**REPLY TO WRITTEN OPINION**  
**INTERNATIONAL PATENT APPLICATION PCT/FI00/00186**  
**APPLICANT: NOKIA NETWORKS OY**  
**Due Date: 15 April 2001**

In response to the Written Opinion mailed on 15.01.2001 we enclose amended claims and respectfully present the following.

Enclosed claim 1 is amended to describe in more detail the states of a mobile station and to clarify the relevant state change. Support for these amendments is on page 4, row 32 – page 5, row 12 and on page 6, row 5 and rows 21-26 of the description.

Enclosed claim 5 is amended to mention a state change from the third state to the second state, so that same terms are used in Claim 5 as in Claim 1. The other claims remain unchanged except for the reference signs, which have been added to the claims.

The paragraph on page 7 of the description, discussing the way in which the objects of the invention are reached, is amended accordingly. The last paragraph on page 13 is modified to mention the appended claims. Other modifications to the description are not made.

As the independent claim is amended to describe the states of a mobile station in more detail and to clarify the relevant state change, as suggested in the Written Opinion, we respectfully request a reconsideration of the statements regarding novelty and inventive step presented in the Written Opinion.

**BERGGREN OY AB**

*Sirpa Kuisma*  
Sirpa Kuisma  
Patent Attorney

Encl.

Replacement pages 7, 13-15

**Berggren Oy Ab**

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LY 0107002-7  
VAT FI01070027  
Kotipaikka Helsinki

Toimitusjohtaja  
Managing Director  
L. Nordin\*

• PATENTIT,  
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S. Ylätaalo\*

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• DESIGNS:

L. Valjakka

• TAVARAMERKIT,  
LAKIASIAT:

• TRADEMARKS,

LEGAL MATTERS:

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S. Henn\*\*  
I. Karlsson\*\*  
H. Halmetoja\*\*  
E-M. Söderström\*\*  
S. Aspola  
J. Talvitie

## SUMMARY OF THE INVENTION

An object of the invention is to realize a method, which alleviates the problems of the prior art. A further object of the invention is to realize a method, which reduces signalling as compared to the known solutions.

- 5 The objects are reached by realizing a method, in which the network checks, if a state change to a state, where a mobile station monitors a forward access channel, is needed for a mobile station, and in which a controlling radio network controller allocates a temporary mobile station identifier for a mobile station, and in which said temporary mobile station identifier is indicated to said mobile station.
- 10 Preferably, the indication is effected by attaching the identifier to a message, which causes the change of the mobile station to the state, in which the mobile station needs the identifier.

The method according to the invention is characterized by that, which is specified in the characterizing part of the independent method claim. The dependent claims

15 describe further advantageous embodiments of the invention.

## BRIEF DESCRIPTION OF THE DRAWINGS

The invention is described in more detail in the following with reference to the accompanying drawings, of which

- Figure 1 illustrates a cellular network structure according to prior art,
- 20 Figure 2 illustrates signalling according to an advantageous embodiment of the invention,
- Figure 3 illustrates signalling according to another advantageous embodiment of the invention,
- Figure 4 illustrates signalling according to a further advantageous embodiment of the invention, and
- 25 Figure 5 illustrates signalling according to a still further advantageous embodiment of the invention.

Same reference numerals are used for similar entities in the figures.

identifier refers to a c-RNTI or a corresponding temporary identifier allocated and used by a radio network controller.

5 In view of the foregoing description it will be evident to a person skilled in the art that various modifications may be made within the scope of the invention. While a preferred embodiment of the invention has been described in detail, it should be apparent that many modifications and variations thereto are possible, all of which fall within the true spirit and scope of the invention as defined by the appended claims.

## Claims

1. A method for allocating a temporary mobile station identifier for a mobile station in a cellular telecommunications network, said mobile station having at least the following states: a first state, where a mobile station listens to paging channel (PCH); a second state, where a mobile station monitors forward access channel (FACH); and a third state, where a dedicated transport channel (DCH) is allocated to a mobile station, **characterised** in that the method comprises steps, in which
  - the network checks, if a state change to the second state is needed for a mobile station,
  - a controlling radio network controller allocates (110, 230, 310, 410) a temporary mobile station identifier for a mobile station, and
  - said temporary mobile station identifier is indicated (130, 260, 350) to said mobile station.
2. A method according to claim 1, **characterised** in that the method further comprises steps, in which
  - a controlling radio network controller allocates (110) said temporary mobile station identifier for a mobile station as a response to receiving a paging request for the mobile station from a serving radio network controller,
  - said controlling radio network controller indicates (120, 130) said allocated identifier to the mobile station by attaching said allocated identifier as a parameter to a paging request transmitted to the mobile station.
3. A method according to claim 2, **characterised** in that if the mobile station does not respond to the paging request, said controlling radio network controller releases (140) said temporary identifier.
4. A method according to claim 1, **characterised** in that the method further comprises steps, in which
  - a controlling radio network controller allocates said temporary mobile station identifier for a mobile station as a response to receiving a paging request response from the mobile station,
  - said controlling radio network controller indicates said allocated identifier to the mobile station using a separate message.
5. A method according to claim 1, **characterised** in that if in said step of checking it is found that a state change from the third state (DCH) to the second state (CCH) is needed, said allocated identifier is indicated to the mobile station

with a message that triggers the state change from the third state (DCH) to the second state (CCH).

6. A method according to claim 1, **characterised** in that said temporary mobile station identifier is used for identifying the mobile station in signalling between two  
5 radio network controllers.

7. A method according to claim 1, **characterised** in that a dedicated temporary mobile station identifier is used for identifying the mobile station in signalling between two radio network controllers.

<b>PATENTTIHAKEMUS</b> NRO Appln. No.  990527	<b>LUOKITUS</b> Classification  H04Q 7/38, H04Q 7/22
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<b>TUTKITTU AINEISTO</b> Research material
<b>Patenttijulkaisukokoelma (FI, SE, NO, DK, DE, CH, EP, WO, GB, US )</b> tutkitut luokat: Published patent specification researched classes H04Q 7/38  <b>sekä lisäksi patenttijulkaisukokoelmasta vain seuraavien pohjoismaiden (FI, SE, NO ja DK) osalta tutkitut luokat:</b>  H04B 7/26, H04M 3/42, H04Q 3/00, 7/04, 7/20, 7/22, 7/30, 7/36
<b>Tiedonhaut ja muu aineisto</b> Data search and other material Seuraavat tietokannat: EPODOC, WPI, PAJ

<b>VIITEJULKAISUT</b> Reference publications		
<b>Kategoria*)</b> Category	<b>Julkaisun tunnistetiedot</b> Identification data	<b>Koskee vaatimuksia</b>
X	EP 0805609A2 (H04Q 7/34)	1 - 6
X	WO 95/10922 (H04Q 7/38)	- " -
X	EP 0649267A2 (H04Q 9/00)	- " -
X	US 5740535 (H04Q 7/00)	- " -
X	EP 0639036A3 (H04Q 7/38)	- " -
*) X Patentoitavuuden kannalta merkittävä julkaisu yksinään tarkasteltuna Y Patentoitavuuden kannalta merkittävä julkaisu, kun otetaan huomioon tämä ja yksi tai useampi samaan kategoriaan kuuluva julkaisu A Yleistä tekniikan tasoa edustava julkaisu, ei kuitenkaan patentoitavuuden este		
X) Particularly relevant if taken alone.		
<b>Päiväys</b> Date 28. 2. 2000	<b>Tutkija</b> Examiner <i>Timo Huhtanen</i>	

# PCT COOPERATION TREATY

## PCT

### INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>49490</b>	<b>FOR FURTHER ACTION</b>	see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.
International application No. <b>PCT/FI 00/00186</b>	International filing date ( <i>day/month/year</i> ) <b>10 March 2000</b>	(Earliest) Priority Date ( <i>day/month/year</i> ) <b>10 March 1999</b>
Applicant <b>NOKIA NETWORKS OY et al</b>		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 2 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. ☐ Certain claims were found unsearchable (See Box I).
2. ☐ Unity of invention is lacking (See Box II).
3. ☐ The international application contains disclosure of a nucleotide and/or amino acid sequence listing and the international search was carried out on the basis of the sequence listing
 

☐ filed with the international application.  
☐ furnished by the applicant separately from the international application,  

☐ but not accompanied by a statement to the effect that it did not include matter going beyond the disclosure in the international application as filed.

☐ transcribed by this Authority.
4. With regard to the title, ☐ the text is approved as submitted by the applicant.  
☒ the text has been established by this Authority to read as follows:  

Temporary identifier allocation method.
5. With regard to the abstract,
 

☒ the text is approved as submitted by the applicant.  
☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.
6. The figure of the drawings to be published with the abstract is:  

Figure No. 2

☒ as suggested by the applicant.  
☐ because the applicant failed to suggest a figure.  
☐ because this figure better characterizes the invention.

☐ None of the figures.

## A. CLASSIFICATION OF SUBJECT MATTER

IPC7: H04Q 7/38

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: H04Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0805609 A2 (HEWLETT-PACKARD COMPANY), 5 November 1997 (05.11.97), figures 10,11, abstract --	1-7
A	WO 9849846 A2 (TELEFONAKTIEBOLAGET LM ERICSSON), 5 November 1998 (05.11.98), abstract --	1-7
A	WO 9805176 A2 (AT & T WIRELESS SERVICES, INC.), 5 February 1998 (05.02.98), abstract -- -----	1-7

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

## \* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"I" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

4 August 2000

Date of mailing of the international search report

04. 09. 2000

Name and mailing address of the International Searching Authority  
European Patent Office P.B. 5818 Patentlaan 2  
NL-2280 HV Rijswijk  
Tel(+31-70)340-2040, Tx 31 651 epo nl.  
Fax(+31-70)340-3016

Authorized officer

ELISABETH ASELIUS/ELY  
Telephone No.



SA 273007

**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

02/12/99

International application No.



PCT/FI 00/00186

Patent document cited in search report			Publication date	Patent family member(s)	Publication date
EP	0805609	A2	05/11/97	NONE	
WO	9849846	A2	05/11/98	AU 7459098 A US 5920814 A	24/11/98 06/07/99
WO	9805176	A2	05/02/98	EP 0909524 A	21/04/99

# PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>49490/SKI/PKK</b>		<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)
International application No. <b>PCT/FI00/00186</b>	International filing date (day/month/year) <b>10/03/2000</b>	Priority date (day/month/year) <b>10/03/1999</b>
International Patent Classification (IPC) or national classification and IPC <b>H04Q7/00</b>		
Applicant <b>NOKIA NETWORKS OY et al.</b>		
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 4 sheets, including this cover sheet.</p> <p><input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of 4 sheets.</p>		
<p>3. This report contains indications relating to the following items:</p> <ul style="list-style-type: none"> <li>I <input checked="" type="checkbox"/> Basis of the report</li> <li>II <input type="checkbox"/> Priority</li> <li>III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</li> <li>IV <input type="checkbox"/> Lack of unity of invention</li> <li>V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</li> <li>VI <input type="checkbox"/> Certain documents cited</li> <li>VII <input type="checkbox"/> Certain defects in the international application</li> <li>VIII <input type="checkbox"/> Certain observations on the international application</li> </ul>		
Date of submission of the demand <b>04/10/2000</b>		Date of completion of this report <b>08.06.2001</b>
Name and mailing address of the international preliminary examining authority:  <b>European Patent Office</b> <b>D-80298 Munich</b> <b>Tel. +49 89 2399 - 0 Tx: 523656 epmu d</b> <b>Fax: +49 89 2399 - 4465</b>		Authorized officer  <b>Schweitzer, J-C</b>  Telephone No. +49 89 2399 8963 

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/FI00/00186

## I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

### Description, pages:

1-6,8-12	as originally filed			
7,13	as received on	11/04/2001	with letter of	09/04/2001

### Claims, No.:

1-7	as received on	11/04/2001	with letter of	09/04/2001
-----	----------------	------------	----------------	------------

### Drawings, sheets:

1/3-3/3	as originally filed
---------	---------------------

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/FI00/00186

- ☐ the description,      pages:  
☐ the claims,      Nos.:  
☐ the drawings,      sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Yes:	Claims	1 - 7
	No:	Claims	
Inventive step (IS)	Yes:	Claims	1 - 7
	No:	Claims	
Industrial applicability (IA)	Yes:	Claims	1 - 7
	No:	Claims	

- 2. Citations and explanations**  
**see separate sheet**

**Concerning section V.2 (reasoned statement under Article 35(2) PCT)**

Claim 1 relates to a method for allocating a temporary mobile station identifier in a cellular telecommunications network, such as the UMTS system, wherein the network checks if a state change from a first state, where the mobile listens to a paging channel (PCH), or from a third state, where a dedicated transport channel (DCH) is allocated to the mobile, to a second state, where the mobile monitors a forward access channel (FACH), is needed for the mobile. If such a state change is required, a controlling radio network controller (RNC) allocates and transmits a temporary mobile station identifier (c-RNTI) to the mobile, preferably in the paging request sent thereto.

Such a method as defined in claim 1, which requires much less signalling than the standard UMTS-technique wherein a Cell Update Procedure is used after a DCH-FACH transition for obtaining the new c-RNTI, is neither taught, nor rendered obvious, alone or in combination, by the prior art documents cited in the International Search Report, which disclose methods for allocating a temporary mobile station identifier (TMSI) in a GSM telecommunications system. In said known methods, see e.g. the cited **EP-A-0 805 609**, a new TMSI is allocated to the subscriber when he enters a new location area, without any hint at the claimed concept of allocating and sending a temporary mobile station identifier to a mobile when a particular state change, i.e. from PCH or DCH to PACH, is needed.

Claim 1 is therefore novel and considered to involve the required inventive step, Articles 33(2) and (3) PCT. The subject-matter of claim 1 is also industrially applicable.

Dependent claims 2 to 7 relate to further implementing details of the method defined by claim 1 to which they refer and are thus equally novel, inventive and industrially applicable.

## SUMMARY OF THE INVENTION

An object of the invention is to realize a method, which alleviates the problems of the prior art. A further object of the invention is to realize a method, which reduces signalling as compared to the known solutions.

- 5 The objects are reached by realizing a method, in which the network checks, if a state change to a state, where a mobile station monitors a forward access channel, is needed for a mobile station, and in which a controlling radio network controller allocates a temporary mobile station identifier for a mobile station, and in which said temporary mobile station identifier is indicated to said mobile station.
- 10 Preferably, the indication is effected by attaching the identifier to a message, which causes the change of the mobile station to the state, in which the mobile station needs the identifier.

- The method according to the invention is characterized by that, which is specified in the characterizing part of the independent method claim. The dependent claims
- 15 describe further advantageous embodiments of the invention.

## BRIEF DESCRIPTION OF THE DRAWINGS

The invention is described in more detail in the following with reference to the accompanying drawings, of which

- Figure 1 illustrates a cellular network structure according to prior art,
- 20 Figure 2 illustrates signalling according to an advantageous embodiment of the invention,
- Figure 3 illustrates signalling according to another advantageous embodiment of the invention,
- Figure 4 illustrates signalling according to a further advantageous embodiment of
- 25 the invention, and
- Figure 5 illustrates signalling according to a still further advantageous embodiment of the invention.

Same reference numerals are used for similar entities in the figures.

identifier refers to a c-RNTI or a corresponding temporary identifier allocated and used by a radio network controller.

- 5 In view of the foregoing description it will be evident to a person skilled in the art that various modifications may be made within the scope of the invention. While a preferred embodiment of the invention has been described in detail, it should be apparent that many modifications and variations thereto are possible, all of which fall within the true spirit and scope of the invention as defined by the appended claims.

## Claims

1. A method for allocating a temporary mobile station identifier for a mobile station in a cellular telecommunications network, said mobile station having at least the following states: a first state, where a mobile station listens to paging channel (PCH); a second state, where a mobile station monitors forward access channel (FACH); and a third state, where a dedicated transport channel (DCH) is allocated to a mobile station, **characterised** in that the method comprises steps, in which
  - the network checks, if a state change to the second state is needed for a mobile station,
  - a controlling radio network controller allocates (110, 230, 310, 410) a temporary mobile station identifier for a mobile station, and
  - said temporary mobile station identifier is indicated (130, 260, 350) to said mobile station.
2. A method according to claim 1, **characterised** in that the method further comprises steps, in which
  - a controlling radio network controller allocates (110) said temporary mobile station identifier for a mobile station as a response to receiving a paging request for the mobile station from a serving radio network controller,
  - said controlling radio network controller indicates (120, 130) said allocated identifier to the mobile station by attaching said allocated identifier as a parameter to a paging request transmitted to the mobile station.
3. A method according to claim 2, **characterised** in that if the mobile station does not respond to the paging request, said controlling radio network controller releases (140) said temporary identifier.
4. A method according to claim 1, **characterised** in that the method further comprises steps, in which
  - a controlling radio network controller allocates said temporary mobile station identifier for a mobile station as a response to receiving a paging request response from the mobile station,
  - said controlling radio network controller indicates said allocated identifier to the mobile station using a separate message.
5. A method according to claim 1, **characterised** in that if in said step of checking it is found that a state change from the third state (DCH) to the second state (CCH) is needed, said allocated identifier is indicated to the mobile station



with a message that triggers the state change from the third state (DCH) to the second state (CCH).

6. A method according to claim 1, **characterised** in that said temporary mobile station identifier is used for identifying the mobile station in signalling between two  
5 radio network controllers.

7. A method according to claim 1, **characterised** in that a dedicated temporary mobile station identifier is used for identifying the mobile station in signalling between two radio network controllers.

The demand must be filed directly with the competent International Preliminary Examining Authority or, if two or more Authorities are competent, with the one chosen by the applicant. The full name or two-letter code of that Authority may be indicated by the applicant on the line below:

IPEA/ EPO

# PCT

## CHAPTER II

### DEMAND

under Article 31 of the Patent Cooperation Treaty:

The undersigned requests that the international application specified below be the subject of international preliminary examination according to the Patent Cooperation Treaty and hereby elects all eligible States (except where otherwise indicated).

For International Preliminary Examining Authority use only

Identification of IPEA		Date of receipt of DEMAND
<b>Box No. I IDENTIFICATION OF THE INTERNATIONAL APPLICATION</b>		Applicant's or agent's file reference 49490/SKU/PKK
International application No. PCT/FI00/00186	International filing date (day/month/year) 10 March 2000 (10.03.00)	(Earliest) Priority date (day/month/year) 10 March 1999 (10.03.99)
Title of invention IDENTIFIER ALLOCATION METHOD		
<b>Box No. II APPLICANT(S)</b>		
Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)  NOKIA NETWORKS OY P.O. Box 300, FIN-00045 NOKIA GROUP, Finland		Telephone No.:
		Facsimile No.:
		Teleprinter No.:
State (that is, country) of nationality: Finland	State (that is, country) of residence: Finland	
Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)  VIALEN, Jukka Tyrskykuja 3 b 13, FIN-02130 ESPOO, Finland		
State (that is, country) of nationality: Finland	State (that is, country) of residence: Finland	
Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)  LONGONI, Fabio Visamäki 5 E 38, FIN-02130 ESPOO, Finland		
State (that is, country) of nationality: Italy	State (that is, country) of residence: Finland	
<input type="checkbox"/> Further applicants are indicated on a continuation sheet.		

**Box No. III AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR CORRESPONDENCE**The following person is ☒ agent ☐ common representativeand ☒ has been appointed earlier and represents the applicant(s) also for international preliminary examination.☐ is hereby appointed and any earlier appointment of (an) agent(s)/common representative is hereby revoked.☐ is hereby appointed, specifically for the procedure before the International Preliminary Examining Authority, in addition to the agent(s)/common representative appointed earlier.Name and address: *(Family name followed by given name; for a legal entity, full official designation.  
The address must include postal code and name of country.)*BERGGREN OY AB  
P.O. Box 16, FIN-00101 HELSINKI, Finland

Telephone No.:

+358 9 693 701

Facsimile No.:

+358 9 693 3944

Teleprinter No.:

☐ Address for correspondence: Mark this check-box where no agent or common representative is/has been appointed and the space above is used instead to indicate a special address to which correspondence should be sent.**Box No. IV BASIS FOR INTERNATIONAL PRELIMINARY EXAMINATION****Statement concerning amendments:\***

1. The applicant wishes the international preliminary examination to start on the basis of:

☐ the international application as originally filed

the description

☐ as originally filed☐ as amended under Article 34

the claims

☐ as originally filed☐ as amended under Article 19 (together with any accompanying statement)☐ as amended under Article 34

the drawings

☐ as originally filed☐ as amended under Article 342. ☐ The applicant wishes any amendment to the claims under Article 19 to be considered as reversed.3. ☐ The applicant wishes the start of the international preliminary examination to be postponed until the expiration of 20 months from the priority date unless the International Preliminary Examining Authority receives a copy of any amendments made under Article 19 or a notice from the applicant that he does not wish to make such amendments (Rule 69.1(d)). *(This check-box may be marked only where the time limit under Article 19 has not yet expired.)*

\* Where no check-box is marked, international preliminary examination will start on the basis of the international application as originally filed or, where a copy of amendments to the claims under Article 19 and/or amendments of the international application under Article 34 are received by the International Preliminary Examining Authority before it has begun to draw up a written opinion or the international preliminary examination report, as so amended.

Language for the purposes of international preliminary examination: English

☒ which is the language in which the international application was filed.☒ which is the language of a translation furnished for the purposes of international search.☒ which is the language of publication of the international application.☐ which is the language of the translation (to be) furnished for the purposes of international preliminary examination.**Box No. V ELECTION OF STATES**The applicant hereby elects all eligible States *(that is, all States which have been designated and which are bound by Chapter II of the PCT)*

excluding the following States which the applicant wishes not to elect:

**Box No. VI CHECK LIST**

The demand is accompanied by the following elements, in the language referred to in Box No. IV, for the purposes of international preliminary examination:

- |  |   |        |
|--|---|--------|
| 1. translation of international application                              | : | sheets |
| 2. amendments under Article 34   | : | sheets |
| 3. copy (or, where required, translation) of amendments under Article 19 | : | sheets |
| 4. copy (or, where required, translation) of statement under Article 19  | : | sheets |
| 5. letter  | : | sheets |
| 6. other ( <i>specify</i> )  | : | sheets |

For International Preliminary Examining Authority use only

received                      not received

<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

The demand is also accompanied by the item(s) marked below:

- |  |   |
|--|---|
| 1. <input checked="" type="checkbox"/> fee calculation sheet                             | 4. <input type="checkbox"/> statement explaining lack of signature                                  |
| 2. <input type="checkbox"/> separate signed power of attorney                            | 5. <input type="checkbox"/> nucleotide and or amino acid sequence listing in computer readable form |
| 3. <input type="checkbox"/> copy of general power of attorney, reference number, if any: | 6. <input type="checkbox"/> other ( <i>specify</i> ):   |

**Box No. VII SIGNATURE OF APPLICANT, AGENT OR COMMON REPRESENTATIVE**

Next to each signature, indicate the name of the person signing and the capacity in which the person signs (if such capacity is not obvious from reading the demand).

BERGGREN OY AB

*Sirpa Kuisma*

Sirpa Kuisma  
Patent Agent

HELSINKI, Finland 4 October 2000

For International Preliminary Examining Authority use only

1. Date of actual receipt of DEMAND:

2. Adjusted date of receipt of demand due to CORRECTIONS under Rule 60.1(b):

3. ☐ The date of receipt of the demand is AFTER the expiration of 19 months from the priority date and item 4 or 5, below, does not apply.

☐ The applicant has been informed accordingly.

4. ☐ The date of receipt of the demand is WITHIN the period of 19 months from the priority date as extended by virtue of Rule 80.5.

5. ☐ Although the date of receipt of the demand is after the expiration of 19 months from the priority date, the delay in arrival is EXCUSED pursuant to Rule 82.

For International Bureau use only

Demand received from IPEA on:

# PCT

## CHAPTER II

### FEE CALCULATION SHEET

#### Annex to the Demand for international preliminary examination

<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 40%;">International application No.</td> <td>PCT/FI00/00186</td> </tr> <tr> <td>Applicant's or agent's file reference</td> <td>49490/SKU/PKK</td> </tr> </table>	International application No.	PCT/FI00/00186	Applicant's or agent's file reference	49490/SKU/PKK	<div style="border: 1px solid black; padding: 5px;"> For International Preliminary Examining Authority use only </div> <div style="border: 1px solid black; padding: 5px; height: 100px;"> Date stamp of the IPEA </div>
International application No.	PCT/FI00/00186				
Applicant's or agent's file reference	49490/SKU/PKK				
Applicant  NOKIA NETWORKS OY					
<b>Calculation of prescribed fees</b>					
1. Preliminary examination fee .....	<div style="border: 1px solid black; display: inline-block; padding: 2px 10px;">EUR 1533</div> <div style="border: 1px solid black; display: inline-block; padding: 2px 5px; margin-left: 5px;">P</div>				
2. Handling fee <i>(Applicants from certain States are entitled to a reduction of 75% of the handling fee. Where the applicant is (or all applicants are) so entitled, the amount to be entered at H is 25% of the handling fee.)</i> .....	<div style="border: 1px solid black; display: inline-block; padding: 2px 10px;">EUR 147</div> <div style="border: 1px solid black; display: inline-block; padding: 2px 5px; margin-left: 5px;">H</div>				
3. Total of prescribed fees Add the amounts entered at P and H and enter total in the TOTAL box .....	<div style="border: 1px solid black; display: inline-block; padding: 2px 10px;">EUR 1680</div>				
<div style="border: 1px solid black; display: inline-block; padding: 2px 10px;">TOTAL</div>					
<b>Mode of Payment</b>					
<input type="checkbox"/> authorization to charge deposit account with the IPEA (see below)	<input type="checkbox"/> cash				
<input type="checkbox"/> cheque	<input type="checkbox"/> revenue stamps				
<input type="checkbox"/> postal money order	<input type="checkbox"/> coupons				
<input type="checkbox"/> bank draft	<input checked="" type="checkbox"/> other (specify): Bank transfer to account 157230-340380				
<b>Deposit Account Authorization</b> <i>(this mode of payment may not be available at all IPEAs)</i>					
The IPEA/ EPO <input type="checkbox"/> is hereby authorized to charge the total fees indicated above to my deposit account.					
<input type="checkbox"/> <i>(this check-box may be marked only if the conditions for deposit accounts of the IPEA so permit)</i> is hereby authorized to charge any deficiency or credit any overpayment in the total fees indicated above to my deposit account.					
Deposit Account Number	Date (day/month/year)				
Signature					

# PATENT COOPERATION TREATY

From the:  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:

BERGGREN OY AB  
P.O. Box 16  
00101 Helsinki  
FINLANDE

*Berggren Oy Ab*

17-01-2001

*SK/1PKK*

## PCT

### WRITTEN OPINION

(PCT Rule 66)

Date of mailing  
(day/month/year)

15.01.2001

*15/1-01*

Applicant's or agent's file reference

49490/SKI/PPK

**REPLY DUE**

**within 3 month(s)**

from the above date of mailing

International application No.

PCT/FI00/00186

International filing date (day/month/year)

10/03/2000

Priority date (day/month/year)

10/03/1999

International Patent Classification (IPC) or both national classification and IPC

H04Q7/00

Applicant

NOKIA NETWORKS OY et al.

1. This written opinion is the first drawn up by this International Preliminary Examining Authority.

2. This opinion contains indications relating to the following items:

- I ☒ Basis of the opinion
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain document cited
- VII ☒ Certain defects in the international application
- VIII ☐ Certain observations on the international application

3. The applicant is hereby invited to reply to this opinion.

**When?** See the time limit indicated above. The applicant may, before the expiration of that time limit, request this Authority to grant an extension, see Rule 66.2(d).

**How?** By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3. For the form and the language of the amendments, see Rules 66.8 and 66.9.

**Also:** For an additional opportunity to submit amendments, see Rule 66.4.  
For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4 bis.  
For an informal communication with the examiner, see Rule 66.6.

If no reply is filed, the international preliminary examination report will be established on the basis of this opinion.

4. The final date by which the international preliminary examination report must be established according to Rule 69.2 is: 10/07/2001.

Name and mailing address of the international preliminary examining authority:



European Patent Office  
D-80298 Munich  
Tel. +49 89 2399 - 0 Tx: 523656 epmu d  
Fax: +49 89 2399 - 4465

Authorized officer / Examiner

Schweitzer, J-C

Formalities officer (incl. extension of time limits)

Finnie, A

Telephone No. +49 89 2399 8251



**I. Basis of the opinion**

1. This opinion has been drawn on the basis of (*substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed".*):

**Description, pages:**

1-13 as originally filed

**Claims, No.:**

1-7 as originally filed

**Drawings, sheets:**

1/3-3/3 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:

☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N) Claims 1

Inventive step (IS) Claims 1

Industrial applicability (IA) Claims

2. Citations and explanations  
**see separate sheet**

**VII. Certain defects in the international application**

The following defects in the form or contents of the international application have been noted:  
**see separate sheet**



**Concerning section V.2 (reasoned statement under Rule 66.2(a)(ii) PCT)**

The following documents (D) are referred to in this written opinion:

**D1 = EP-A-0 805 609**

**D2 = WO-A-98/49846**

**D3 = WO-A-98/05176**

Each of the above-mentioned prior art references discloses a method for allocating a temporary mobile station identifier (TMSI) in a GSM telecommunications system. As disclosed in **D1**, see the part "*User Identity - IMSI and TMSI*" on cols. 10 and 11, such a TMSI is allocated to the subscriber "if a state changes is needed" in the network, e.g. when the subscriber enters a new location area. Similar methods are to be found in **D2**, see the abstract, and **D3**, see page 3, lines 11 to 17.

Although it is recognized that these methods for allocating a temporary mobile station identifier known from **D1** to **D3** are substantially different from the method as described in the different embodiments of the invention, which is concerned with third generation cellular telecommunications systems, such as the UMTS system, these differences are however, in the opinion of the examiner, not sufficiently brought out in the wording of present claim 1, which can apparently be read on each of said prior art disclosures dealing with GSM systems.

This is particularly due to the use of the expression "*if a state changes is needed*" which is rather vague and speculative and, as such, does not sufficiently and clearly distinguish the claimed method over the available prior.

Claim 1 in its present broad formulation, therefore, does not meet the requirements of novelty set out in Article 33(2) PCT. Neither does claim 1 involve an inventive step, Article 33(3) PCT.

To overcome the above objections, it is proposed to more precisely define the "state changes", cf. e.g. the passage on page 6, lines 23 to 26.

Alternatively, the particular manner of transmitting the identifier to the mobile station as set out in dependent claims 2 and/or 4 could be incorporated into the wording of claim 1 in order to clearly and sufficiently distinguish the claimed method over the available prior art.

**Concerning section VII (form and contents).**

If any amended independent claims are filed, the opening part of the description including the summary of the invention (on page 7) should be brought into agreement with the wording thereof.

In order to meet the requirements of Rule 5.1.(a),(ii) PCT, at least one of the above-noted prior art document should be acknowledged by reference and briefly discussed in the introductory part of the description.

All the claims should include reference signs in parentheses where features shown in the drawings are referred to, Rule 6.2.(b) PCT.

The general "true spirit and scope" statement in the description at page 13 is unclear, and when used to interpret the claims renders them also unclear, contrary to Article 6 PCT. The statement should therefore be deleted.

The attention of the applicant is finally drawn to the fact that the application may not be amended in such a way that it contains subject-matter which extends beyond the content of the application as filed, Article 34(2)(b) PCT. Amendments should be filed by way of replacement pages in the manner stipulated by Rule 66.8(a) PCT. In particular, fair copies of the amendments should be filed preferably in triplicate. Moreover, the applicant's attention is drawn to the fact that, as a consequence of Rule 66.8(a) PCT the examiner is not permitted to carry out any amendments under the PCT procedure, however minor these may be.